# Review of 2030 Scenarios California Water Plan Update Process

# Presentation Topics ♦ What are scenarios?

- Why are we using scenarios?
- Three scenarios for CWPU 2004
- Application of scenarios in CWPU process

lide 2

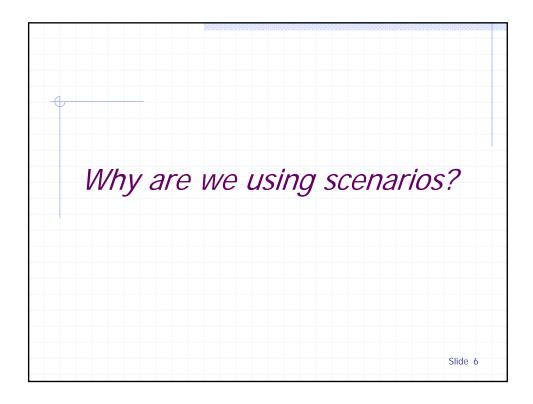
# What are scenarios? Slide 3

## What are scenarios?

- Multiple versions of plausible future conditions (varied by key water demand drivers)
- Represent different possible water demand levels in the year 2030
- Each scenario is defined by one level of supplyrelated water management conditions (i.e. supply drivers)

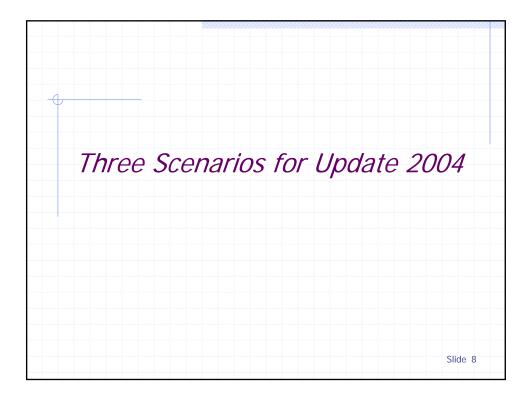
# Scenarios are NOT:

- Intended to identify the most probable future
- Preferred visions crafted by interest groups with the intent of working toward that future



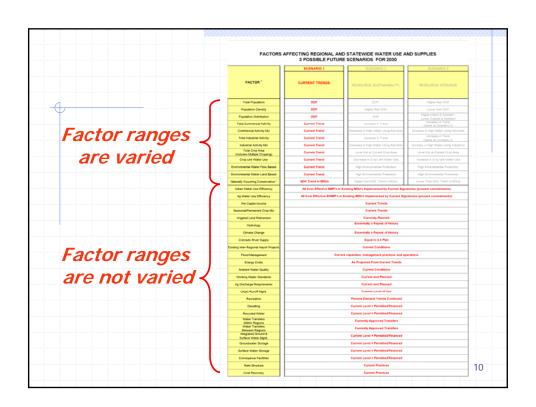
# Why are we using scenarios?

- Help address the wide range of future uncertainties
- Help decision makers better assess risks and tradeoffs associated with resource management strategies by examining their efficacy under various future conditions (i.e." durability" of resource management strategies)

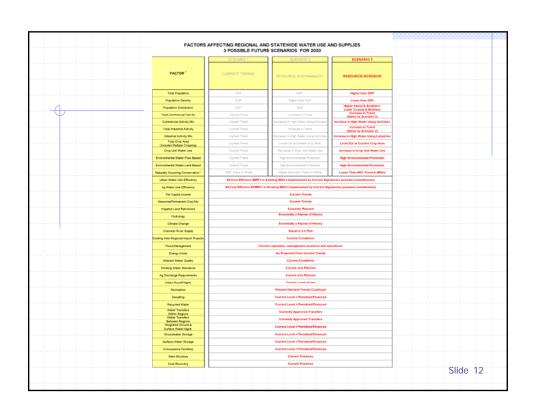


# Three Scenarios for Update 2004

- Scenario 1 Current trends: Continue based on current trends with no big surprises
- Scenario 2 Resource sustainability: California is more efficient in 2030 water use than today while still growing its economy and restoring its environment
- Scenario 3 Resource intensive: California is highly productive, respectful of the environment, yet less efficient in 2030 water use than in Scenarios 1 or 2.



FACTORS A		ND STATEWIDE WATER USE A	AND SUPPLIES	
		RE SCENARIOS FOR 2030		
	SCENARO 1	SCENARIO 2	SCENARIO 3	
FACTOR 1	CURRENT TRENDS	RESOURCE SUSTAINABILITY	RESOURCE INTENSIVE	
Total Population	004	DOF	Higher than DOF	
Population Density	009	Higher than BOF	Lover than DOF	1 1 1 1 1 1
Population Distribution	00*	cor	Higher Inland & Southern.	
Total Commercial Astroly	Querent Years)	Increase in Frend	Lower Countel & Northern Increase in Trend (Same as Specano 2)	
Commercial Activity Mix	Current Trend	Decrease in High Water Using Activities	Increase in High Water Using Activities	
Total Industrial Activity	Current Trend	Increase in Trend	Morease in Trent clame as Scenero Zi	
Industrial Activity Mix	Current Trend	Decrease in High Water Using Activities	Increase in High Water Deing Industries	
Yotal Crop Area (Includes MAtigne Cropping)	Current Frend	Level Out at Current Crop Area	Lever Out at Current Crop Area	
Crop Unit Water Use	Current Trend	Decrease in Crop Unit Water Use	Increase in Crop Lint Water Use	
Environmental Water-Flow Based	Current Frend	High Environmental Protection	High Environmental Protection	
Environmental Water-Land Based	Current Drend	High Environmental Protection	High Environmental Protection	
Naturally Occurring Conservation <sup>2</sup>	NOC Trend in MOUs	Higher than NOC Trend in MOUs	Lower Than NOC Trend in MOUs	1
Urban Water Use Efficiency	All Cost Effective BMP's in	n Existing MOU's Implemented by Current Sign	natories (present commitments)	1
Ag Water Use Efficiency	All Cost Effective EWMP's	in Existing MOU's Implemented by Current Sig	pratories (present commitments)	1
Per Capita Income	Current Trends			1
Seasonal/Permanent Crop Mix	Current Trends			1
Inigated Land Retrement	Currently Planned			1 1 1 1 1 1
Hydrology	Essentially a Repeat of History			1 1 1 1 1 1
Climate Change		Essentially a Repeat of History		
Colorado River Supply		Equal to 4.4 Plan		
Existing Inter-Regional Import Projects		Current Conditions		
Flood Management	Cur	ment capacities, management practices and o	perations	
Energy Costs	As Projected From Current Trends			
Ambient Water Quality		Current Conditions		1
Orreing Water Standards		Current and Planned		1
Ag Discharge Requirements	Current and Flanned			
Otton Runoff Myrs.		Current Level of the		1
Recreation		Present Demand Trends Continued		
Desating		Current Level + Permitted Financed		
Recycled Water		Current Level + Permitted Financed		
Water Transfers Within Regions		Currently Approved Transfers		
Water Transfers Between Regions		Currently Approved Transfers		
Integrated Ground & Surface Water Migrat		Current Level + Permitted Financed		
Groundwater Storage		Current Level + Permitted Financed		
Surface Water Storage		Current Level + Permitted Financed		
Conveyance Facilities		Current Level + Permitted Financed		
Rate Structure		Current Practices		1
Cost Recovery		Current Practices		Slide 1
		7 1 1 1	1 7 7 1	1 1 2 2 2 2



# Application of scenarios in the CWPU process

## Application of scenarios in WPU process

### 3 Key Components

- 1 Develop and apply analytical procedures, tools and data (including quantification of the scenarios)
- 2 Develop accompanying resource management response packages (Update 2008)
- 3 Formulate study permutations based based based

